

***NATIONAL WEATHER SERVICE  
PRODUCT DESCRIPTION DOCUMENT (PDD)  
TYPE: Official Product  
DATE: Feb. 03, 2003***

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THREE-MONTH PROBABILITY OF EXCEEDENCE OUTLOOKS

**Part 1 - Mission Connection**

**1. Product/Service Description:**

The Climate Prediction Center (CPC) issues a series of thirteen three-month probability of exceedence outlooks for temperature, precipitation, and heating and cooling degree days for the conterminous U.S.

**2. Purpose/Intended Use:**

Since these outlooks pertain to the average temperature and total precipitation for the entire valid period and not to the variability within it, they will not help people planning events for specific dates or sub-periods. The outlooks will be of most use for economic and business planning, particularly when used with 30 year base period means.

**3. Audience:**

The audience is primarily decision makers with some technical background in weather and climate sensitive activities sensitive to inter-seasonal and inter-annual climate variation (e.g. weather risk management, energy/utilities, agriculture, hydrology, etc.).

**4. Presentation Format:**

CPC presented the outlooks as text tables over NWS dissemination systems.

**5. Feedback Method:**

E-mail both [Robert.Leffler@noaa.gov](mailto:Robert.Leffler@noaa.gov) and [Barbara.Mayes@noaa.gov](mailto:Barbara.Mayes@noaa.gov)

**Part 2 - Technical**

**1. Format and Science Basis:**

CPC provides mean (or areal average mean) temperatures, total (or areal average total) precipitation amounts, and total (or areal average total) heating or cooling degree days for various probabilities of exceedence for a given city or climate outlook divisional area and three-month valid time. There are the 102 climate outlook divisions in the conterminous U.S. These outlooks are statistically consistent with the three-month temperature and precipitation outlooks.

The outlook city locations are as follows:

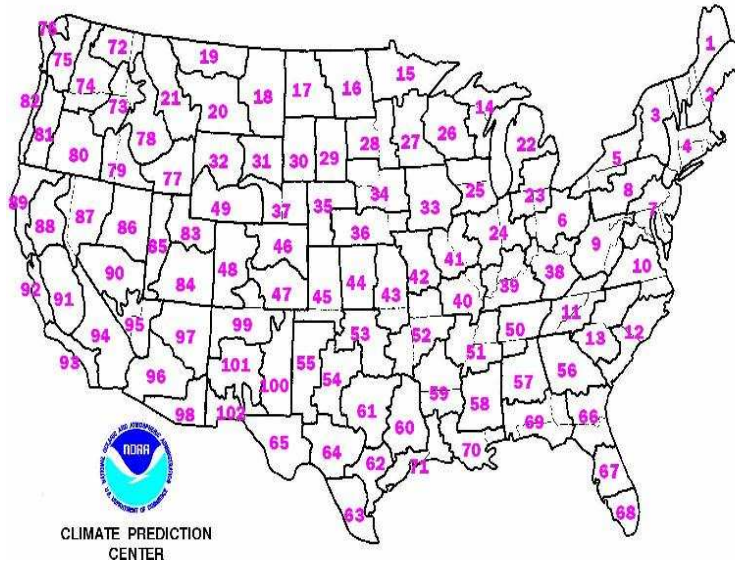


Figure 1: CPC climate outlook divisions in contiguous U.S.

City	ID	City	ID	City	ID
Albuquerque, NM	ABQ	Atlanta, GA	ATL	Austin, TX	AUS
Birmingham, AL	BHM	Bismark, ND	BIS	Boston, MA	BOS
Buffalo, NY	BUF	Charlotte, NC	CLT	Chicago, IL	MDW
Cincinnati, OH	LUK	Cleveland, OH	CLE	Columbus, OH	CMH
Dallas, TX	DAL	Dayton, OH	DAY	Denver, CO	DEN
Detroit, MI	DET	El Paso, TX	ELP	Fresno, CA	FAT
Grand Rapids, MI	GRR	Greensboro, NC	GSO	Hartford, CT	HFD
Houston, TX	HOU	Indianapolis, IN	IND	Jacksonville, FL	JAX
Kansas City, MO	MCI	Las Vegas, NV	LAS	Los Angeles, CA	LAX
Louisville, KY	SDF	Memphis, TN	MEM	Miami, FL	MIA
Milwaukee, WI	MKE	Minneapolis, MN	MSP	Nashville, TN	BNA
New Orleans, LA	MSY	New York City, NY	LGA	Norfolk, VA	ORF
Oklahoma City, OK	OKC	Omaha, NE	OMA	Orlando, FL	MCO
Phoenix AZ	PHX	Philadelphia PA	PHL	Pittsburgh PA	PIT
Portland, OR	PDX	Providence, RI	PVD	Raleigh, NC	RDU
Rochester, NY	ROC	Sacramento, CA	SAC	Saint Louis, MO	STL
Salt Lake City, UT	SLC	San Antonio, TX	SAT	San Diego	SAN
San Francisco, CA	SFO	Seattle, WA	SEA	Tampa, FL	TPA
Washington DC,	DCA	West Palm Beach, FL	PBI	Anchorage, AK	ANC
Annette, AK	ANN	Barrow, AK	BRW	Cold Bay, AK	CDB
Fairbanks, AK	FAI	Juneau, AK	JNU	Kotzebue, AK	OTZ
Nome, AK	OME	Yakutat, AK	YAK		

For each climate outlook divisional area or city, CPC provides mean temperatures (F in tenths), total precipitation amounts (inches in hundredths), and total heating and cooling degree days (whole F) having various probabilities of exceedence from 98 to 2 percent. CPC also provides the 50 percent climatological probability of exceedence values. The following

are generic examples:

## 2. Availability:

These are scheduled products. CPC issues these 13 outlooks simultaneously once a month on the third Thursday of the month around 3:00 p.m. Eastern local time. CPC does not issue updates or amendments. They will issue corrections as needed. CPC issues these products on NWS dissemination systems under the following product IDs:

Lead time is indicated by the number in the WMO heading and last letter in the AWIPS ID. (i.e. 01 and A have a lead time of 0.5 month, 02 and B have a lead time of 1.5 months, etc.)

... Outlook Divisional Areas ...

Temperature		Precipitation	
WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
FXUS(01-13)KWNC	POELT(A-M)	FXUS(61-73) KWNC	POELP(A-M)

Heating Degree Days		Cooling Degree Days	
WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
FXUS(28-40)KWNC	POELH(A-M)	FXUS(41-53) KWNC	POELC(A-M)

... Site Specific Cities ...

Temperature	No Precipitation Outlooks
WMO Heading	AWIPS ID
FXUS(01-13)KWNC	POECT(A-M)

Heating Degree Days		Cooling Degree Days	
WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
FXUS(28-40)KWNC	POECH(A-M)	FXUS(41-53) KWNC	POECC(A-M)

This information is also available on the CPC web site at

<http://www.cpc.ncep.noaa.gov/pacdir/NFORdir/HOME3.html>

## 3. Additional Information:

- Valid Time: CPC will issue the 13 outlooks with lead times from 0.5 months to 12.5 months. For example, in mid-January, CPC will issue Three-Month Outlooks for February through April, March through May, April through June, and so on to February through April of the following year.
- Product Expiration Time: The 0.5 month lead time outlook expires at the beginning of the valid time of that outlook. The other outlooks expire when the next set of outlooks are issued (i.e. on the third Thursday of the following month).
- Creation Software: CPC uses a statistical postprocessing software program.